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New York, NY 10038

EXAMINER

STULTZ, JESSICA T

ART UNIT	PAPER NUMBER
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2873

DATE MAILED: 08/18/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/043,504

Applicant(s)

IORI ET AL.

Examiner

Jessica T Stultz

Art Unit

2873

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-39 is/are pending in the application.
- 4a) Of the above claim(s) 10-27, 30, 31 and 35-39 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9, 28-29, and 32-34 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 January 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_.
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_ 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION*****Election/Restrictions***

Applicant's election with traverse of claims 1-9 (and therefore generic claim 34) in Paper No. 6 is acknowledged. The traversal is on the ground(s) that a single search can be performed to evaluate the patentability of the claimed groups. This is not found persuasive because searching the non-elected claims would require additional searching and would place an undue burden on the examiner since these claims include more limitations, which would need to be additionally searched and are drawn to either different species of optical lens with or a specific method of making an optical lens as discussed in Paper No. 4. Specifically, the claims in Groups 1b-1d and 1f-1g refer to the embodiments of Figures 2-4. The embodiments differ from the embodiment of Figure 1, which is claimed in Group 1a, since the order of the layers formed on the substrate differs in each embodiment and therefore a separate search is necessary to determine the patentability of each of the claimed embodiments. In addition, upon further consideration by the examiner, Group 1e, claims 28-29 and Group 1h, claims 32-33, were searched as well since an undue burden was not placed on the examiner to examine these claims along with Group 1a, claims 1-9.

The requirement is still deemed proper and is therefore made FINAL.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-2, 4-9, 28-29, and 32-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Arden et al in view of Challener.

Regarding claims 1, 8-9, 28-29, and 34 Arden et al discloses a sunglass lens for use in a pair of sunglasses (Abstract and Column 2, lines 1-52, wherein the sunglass lens is shown in Figure 1) comprising: a plastic substrate (Column 2, line 1, wherein the substrate is either glass or plastic, Figure 1); a first dielectric layer comprising a high index dielectric material (Column 2, lines 40-52, wherein the high index layer is “2”, Figure 1); a second dielectric layer comprising a first low index dielectric material (Column 2, lines 6-21, wherein the second layer is “1”, which has a low index, Figure 1); and a third dielectric layer comprising a second low index material (Column 2, lines 40-52, wherein the third layer is “3”, Figure 1), but does not specifically disclose that the high index layer is covering an outer surface of the substrate or that the third layer gradiently covers only a portion of the second dielectric layer. However it would have been obvious to one having ordinary skill in the art at the time the invention was made rearrange layer (1) to be located between layers (2 and 3) since its purpose is for absorption and to lower the transmission of light (Column 2, lines 6-39) and it has been held that rearranging parts of an invention involves only routine skill in the art. *In re Japikse*, 86 USPQ 70.

Nevertheless, Challener teaches of a probe having dielectric layers wherein the first layer is a dielectric layer of high index which would inherently cover a substrate (Section 55, wherein the high index dielectric layer is “82”, Figure 1), a second dielectric layer comprising a first low index dielectric material uniformly covering the first dielectric layer (Section 55, wherein the low index dielectric layer is “84”, Figure 1); and a third dielectric layer comprising a second low index dielectric material gradiently covering only a portion of the second dielectric layer

(Section 52 and 56, wherein the third dielectric layer is of low index dielectric “99” which gradiently covers only a portion of the second layer “84” , Figure 1) for the purpose of making an anti-reflective coating for a lens (Section 55, wherein the probe of Figure 9 absorbs light rays rather than reflects light rays, Figure 10). Therefore it would have been obvious for the lens of Arden et al to have the high index layer covering an outer surface of the substrate and the third layer gradiently covering only a portion of the second dielectric layer since Challener teaches of a probe having dielectric layers wherein the first layer is a dielectric layer of high index which would inherently cover a substrate, a second dielectric layer comprising a first low index dielectric material uniformly covering the first dielectric layer; and a third dielectric layer comprising a second low index dielectric material gradiently covering only a portion of the second dielectric layer for the purpose of making an anti-reflective coating for a lens.

Regarding claims 2, 6, and 7, Arden et al further discloses that the first and second low index dielectric material are made of different materials, wherein the first layer is made of  $\text{TiO}_x$  (Column 2, lines 6-21, wherein the x could be equal to 2 and the first layer is “1”, Figure 1) and the second layer is made of  $\text{SiO}_2$  (Column 2, lines 44-47, wherein the second layer is “3”, Figure 1).

Regarding claims 4 and 5, it is further taught by Challener that in an anti-reflective lens, a low index material cover approximately one half of another dielectric layer in its normal operation orientation (Section 44, wherein the lower index layer “24” covers half of the higher index layer “26”, Figure 2), for the purpose of forming a dual thickness metallic layer for a lens (Section 44). Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made for the lens of Arden et al to further include the low index material

Art Unit: 2873

cover approximately one half of another dielectric layer in its normal operation orientation since Challenger teaches that in an anti-reflective lens, a low index material cover approximately one half of another dielectric layer in its normal operation orientation for the purpose of forming a dual thickness metallic layer for a lens.

Regarding claims 32 and 33, Arden et al discloses a sunglass lens as is disclosed above and Challenger further teaches of a probe with dielectric layers having two zones with differently colored reflection, one of the zones being gradiently reflective from the side of the wearer (Section 44, wherein the lower index layer "24" gradiently covers half of the higher index layer "26" and provides two different zones of reflection, Figures 2 and 3a) for the purpose of forming a lens which can focus light beams by having two areas of differing reflection (Section 44). Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made for the lens of Arden et al to further include at least two zones with differently colored reflection, one of the zones being gradiently reflective from the side of the wearer since Challenger further teaches of a probe with dielectric layers having two zones with differently colored reflection, one of the zones being gradiently reflective from the side of the wearer for the purpose of forming a lens which can focus light beams by having two areas of differing reflection.

Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Arden et al in view of Challenger and further in view of Pucilowski et al.

Regarding claim 3, Arden et al and Challenger disclose and teach of the lens as disclosed above, but do not specifically disclose that the high index dielectric material is  $\text{Cr}_2\text{O}_3$ . Pucilowski et al teaches that it is well known in the art of sunglasses to use this  $\text{Cr}_2\text{O}_3$  as a high index

Art Unit: 2873

dielectric for the purpose of giving the glasses a lime green tint (Abstract and Column 2, lines 43-46). Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made for the lens of Arden et al and Challener to further include  $\text{Cr}_2\text{O}_3$  as the high index material since Pucilowski et al teaches that it is well known in the art of sunglasses to use this material in as a high index dielectric for the purpose of giving the glasses a lime green tint.

### *Conclusion*

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Sternbergh, Pang et al, and Jewell are cited as being some similar structure to the claimed invention since they all disclose lens wherein dielectric layers are used and alternate between layers of high and low indices.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jessica T Stultz whose telephone number is (703) 305-6106. The examiner can normally be reached on M-Th 7:30-5, and alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Georgia Epps can be reached on 703-308-4883. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-7722 for regular communications and 703-308-7722 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

Application/Control Number: 10/043,504

Page 7

Art Unit: 2873

*Jessie*

Jessica Stultz

August 7, 2003

*Georgia Epps*

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